

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A method for treating material, said method comprising the steps of:

heating and pressurizing the material to a temperature between approximately 705°F and approximately 1500°F and a pressure of between approximately 20 atmospheres and approximately 200 atmospheres in a first chamber;

retaining said material in said first chamber at said temperature, said pressure and in an atmosphere that is overall net reducing to volatilize a portion of said material;

transferring said volatilized portion to a second chamber;

adding oxidant to said second chamber; and

oxidizing said volatilized portion in said second chamber at a temperature between approximately 1000°F and approximately 1800°F and a pressure of between approximately 20 atmospheres and approximately 200 atmospheres.

2. (Original) The method as recited in claim 1 wherein the step of heating and pressurizing the material in a first chamber comprises injecting steam into said first chamber.

Claim 3 (Cancelled)

4. (Original) The method as recited in claim 1 further comprising the step of injecting steam into said second chamber.

5. (Original) The method as recited in claim 1 wherein said oxidizing step produces a process effluent containing carbon dioxide and said method further comprises the step of separating a portion of said carbon dioxide from said process effluent.

6. (Original) The method as recited in claim 5 further comprising the step of liquefying said separated carbon dioxide.

7. (Original) The method as recited in claim 1 further comprising the step of using an auger in said first chamber to mix and transport the material within said first chamber during said retaining step.

8. (Original) The method as recited in claim 1 wherein said first chamber and said second chamber are located within separate pressure vessels.

9. (Original) The method as recited in claim 1 wherein said first chamber and said second chamber are located within a single pressure vessel.

Claims 10 - 40 (Cancelled)